

FIG. 1

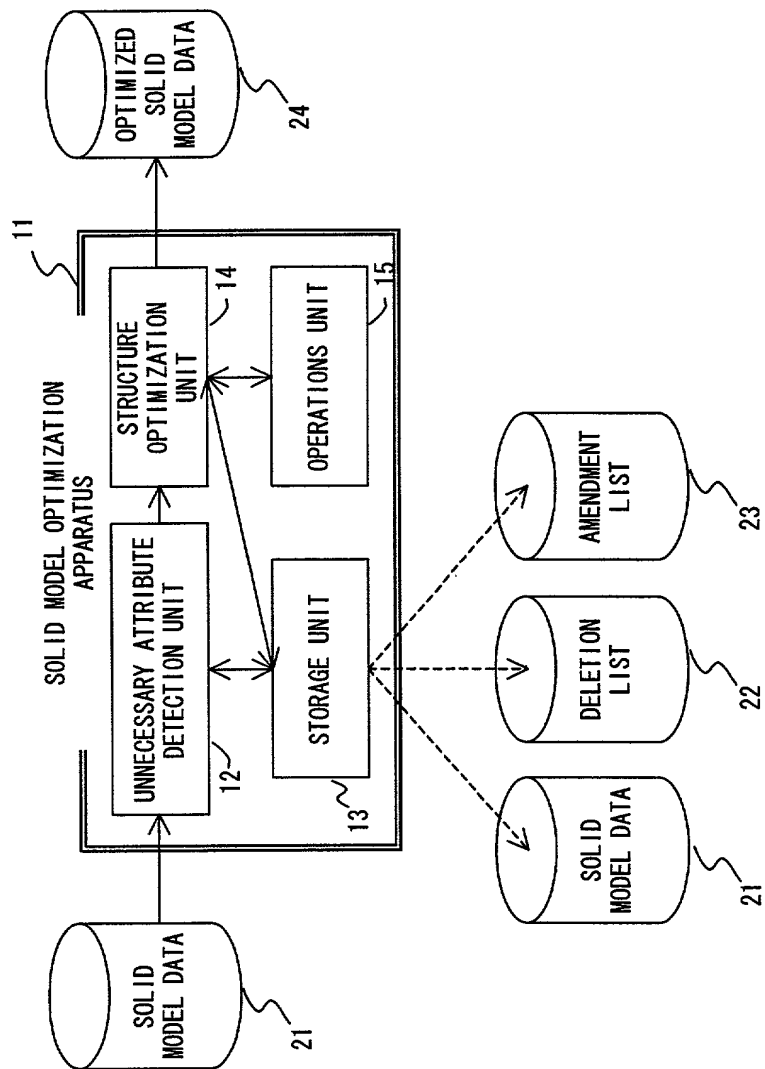


FIG. 2

FIG. 4

ATTRIB- UTE NUMBER	VERTEX COORDINATES
	ARRANGEMENT POSITION
	DEFINITION INFORMATION

F I G. 5

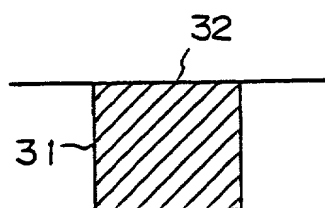


FIG. 6

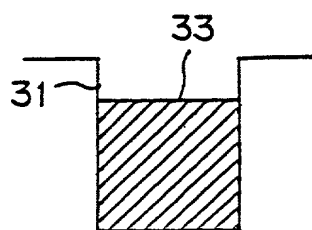


FIG. 7

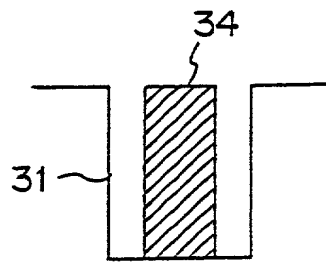


FIG. 8

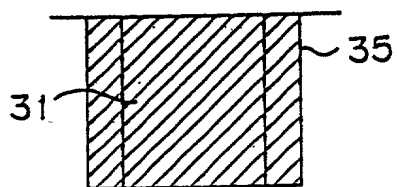


FIG. 9

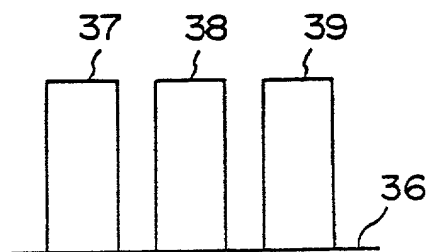
[illegible]

FIG. 10

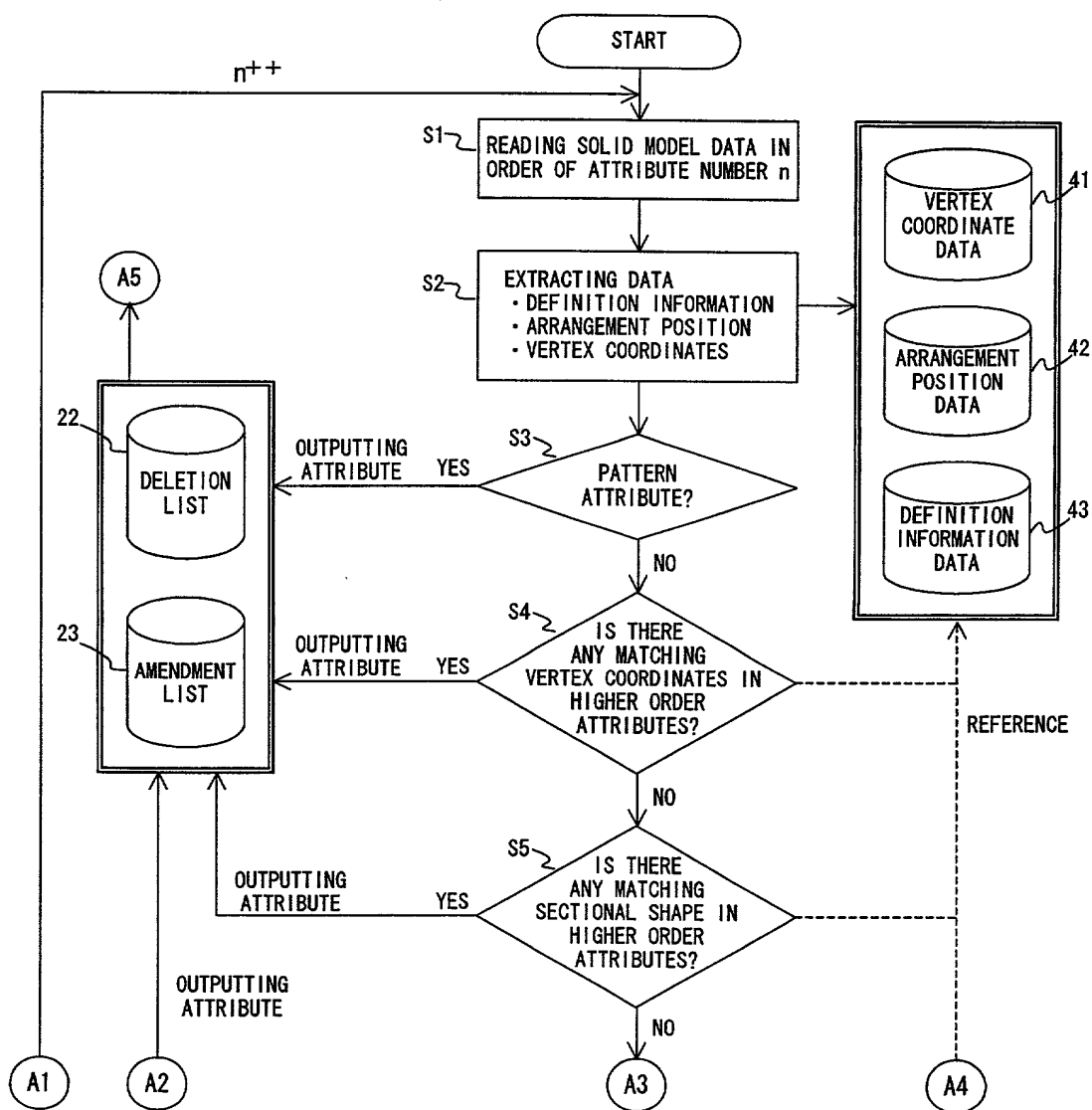


FIG. 11

```

graph TD
    A3((A3)) --> S6{IS THERE ANY  
ATTRIBUTE MATCHING  
IN ARRANGEMENT PLANE  
IN HIGHER ORDER  
ATTRIBUTES?}
    S6 -- YES --> S7{DEFINITION INFORMATION  
COMPLETELY MATCHING?}
    S6 -- NO --> S8{IS SECTIONAL  
SHAPE COMPLETELY  
INCLUDED IN  
ARRANGEMENT PLANE  
SHAPE?}
    S7 -- YES --> A1((A1))
    S7 -- NO --> S8
    S8 -- YES --> S9{HEIGHT HAVING SAME  
ABSOLUTE VALUE AND  
INVERSE SIGN?}
    S8 -- NO --> S10{SECTIONAL SHAPE  
COMPLETELY  
ENCOMPASSES  
ARRANGEMENT PLANE  
SHAPE?}
    S9 -- YES --> A2((A2))
    S9 -- NO --> S10
    S10 -- YES --> A2
    S10 -- NO --> A5((A5))
    A5 --> S12{FINAL  
ATTRIBUTE?}
    S12 -- YES --> END([END])
    S12 -- NO --> A1
    A4((A4)) -.-> S6
    A4 -.-> S8
    A4 -.-> S10
    style A4 stroke-dasharray: 5 5
    style S6 stroke-dasharray: 5 5
    style S8 stroke-dasharray: 5 5
    style S10 stroke-dasharray: 5 5
    style A5 stroke-dasharray: 5 5
  
```

The flowchart illustrates the attribute matching process. It begins with a start point leading to decision S6: "IS THERE ANY ATTRIBUTE MATCHING IN ARRANGEMENT PLANE IN HIGHER ORDER ATTRIBUTES?". A dashed line from A4 (REFERENCE) points to S6. If YES, it proceeds to S7: "DEFINITION INFORMATION COMPLETELY MATCHING?". If YES, it leads to A1. If NO, it proceeds to S8: "IS SECTIONAL SHAPE COMPLETELY INCLUDED IN ARRANGEMENT PLANE SHAPE?". If YES, it leads to S9: "HEIGHT HAVING SAME ABSOLUTE VALUE AND INVERSE SIGN?". If YES, it leads to A2. If NO, it proceeds to S10: "SECTIONAL SHAPE COMPLETELY ENCOMPASSES ARRANGEMENT PLANE SHAPE?". If YES, it leads to A2. If NO, it leads to A5. From A5, it proceeds to S12: "FINAL ATTRIBUTE?". If YES, it leads to END. If NO, it leads to A1. Dashed lines also connect A4 to S8 and S10.

FIG. 12

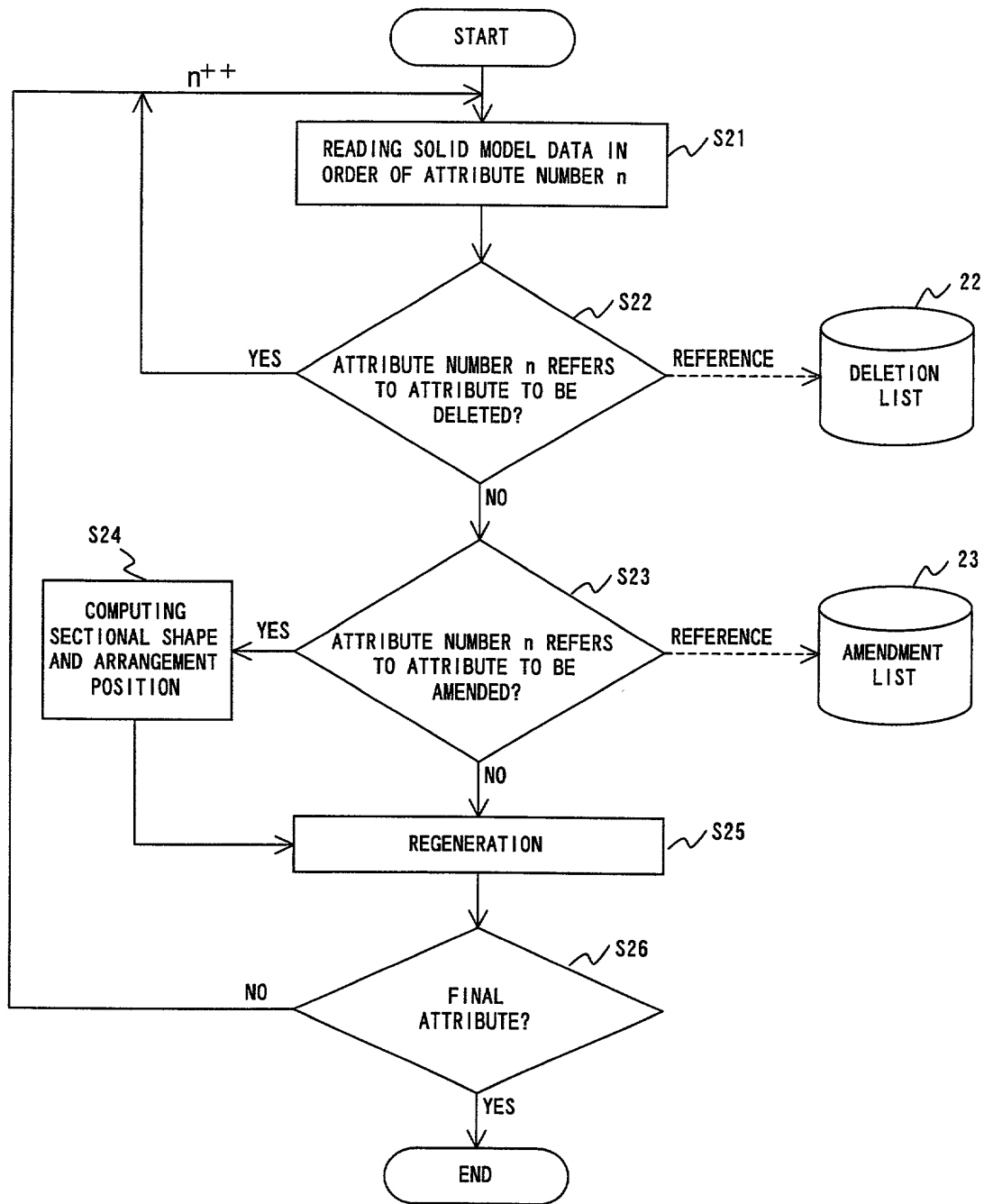


FIG. 13

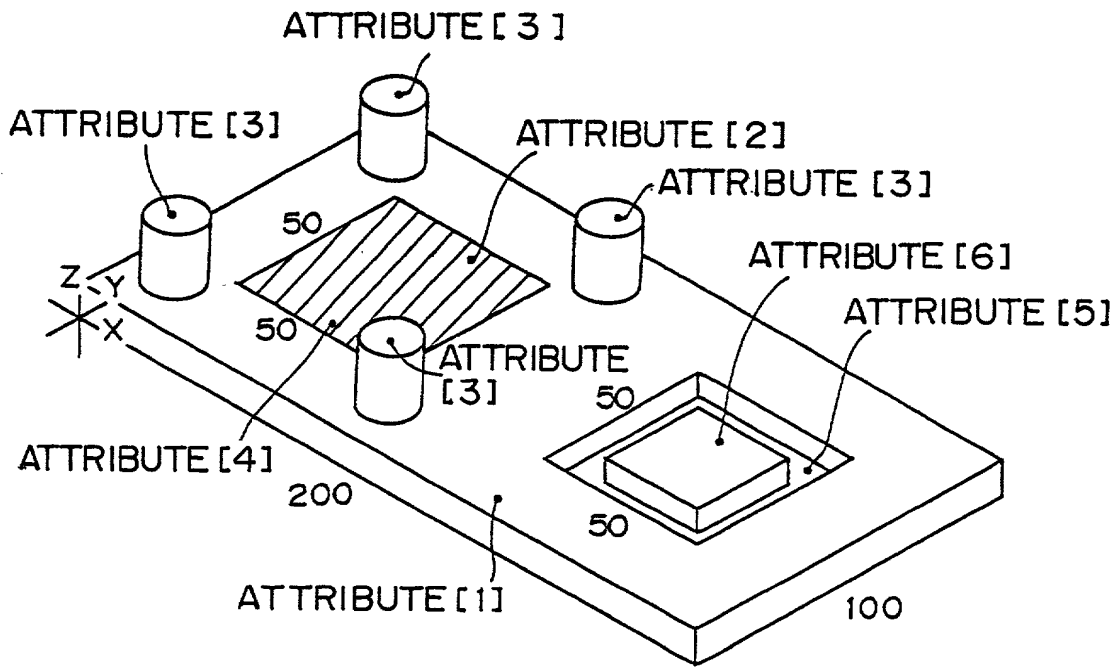


FIG. 14

NUMBER	ITEM	DATA
1	VERTEX COORDINATES	{(0, 0, 0), (200, 0, 0), (0, 100, 0), (0, 0, 10), (200, 0, 10), (0, 100, 10)}
	ARRANGEMENT POSITION	-
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=10
2	VERTEX COORDINATES	{(25, 25, 10), (75, 25, 10), (75, 75, 10), (25, 75, 10), (25, 25, 0), (75, 25, 0), (75, 75, 0), (25, 75, 0)}
	ARRANGEMENT POSITION	1:F1, 1:E1-25, 1:E2-25
	DEFINITION INFORMATION	CUT, PROJECTION, h=-10
3	VERTEX COORDINATES	{(12.5, 12.5, 10)10} (12.5, 12.5, 40), {(87.5, 12.5, 10)10} (87.5, 12.5, 40), {(87.5, 87.5, 10)10} (87.5, 87.5, 40), {(12.5, 87.5, 10)10} (12.5, 87.5, 40)
	ARRANGEMENT POSITION	1:F1, 2:E1-12.5, 2:E2-12.5
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=30
4	VERTEX COORDINATES	{(25, 25, 10), (75, 25, 10), (75, 75, 10), (25, 75, 10), (25, 25, 0), (75, 25, 0), (75, 75, 0), (25, 75, 0)}
	ARRANGEMENT POSITION	1:F2, 1:E5-25, 1:E6-25
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=10
5	VERTEX COORDINATES	{(125, 25, 10), (175, 25, 10), (175, 75, 10), (125, 75, 10), (125, 25, 5), (175, 25, 5), (175, 75, 5), (125, 75, 5)}
	ARRANGEMENT POSITION	1:F1, 1:E1-125, 1:E2-25
	DEFINITION INFORMATION	CUT, PROJECTION, h=-5
6	VERTEX COORDINATES	{(135, 35, 5), (165, 35, 5), (165, 65, 5), (135, 65, 5), (135, 35, 10), (165, 35, 10), (165, 65, 10), (135, 65, 10)}
	ARRANGEMENT POSITION	5:F1, 1:E1-10, 1:E2-10
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=5

FIG. 15

0

NUMBER	ITEM	DATA
2	VERTEX COORDINATES	{(25, 25, 10), (75, 25, 10), (75, 75, 10), (25, 75, 10)} (25, 25, 0), (75, 25, 0), (75, 75, 0), (25, 75, 0)
	ARRANGEMENT POSITION	1:F1, 1:E1-25, 1:E2-25
	DEFINITION INFORMATION	CUT, PROJECTION, h=-10
4	VERTEX COORDINATES	{(25, 25, 10), (75, 25, 10), (75, 75, 10), (25, 75, 10)} (25, 25, 0), (75, 25, 0), (75, 75, 0), (25, 75, 0)
	ARRANGEMENT POSITION	1:F2, 1:E5-25, 1:E6-25
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=10
6	VERTEX COORDINATES	{(135, 35, 5), (165, 35, 5), (165, 65, 5), (135, 65, 5)} (135, 35, 10), (165, 35, 10), (165, 65, 10), (135, 65, 10)
	ARRANGEMENT POSITION	5:F1, 1:E1-10, 1:E2-10
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=5

FIG. 16

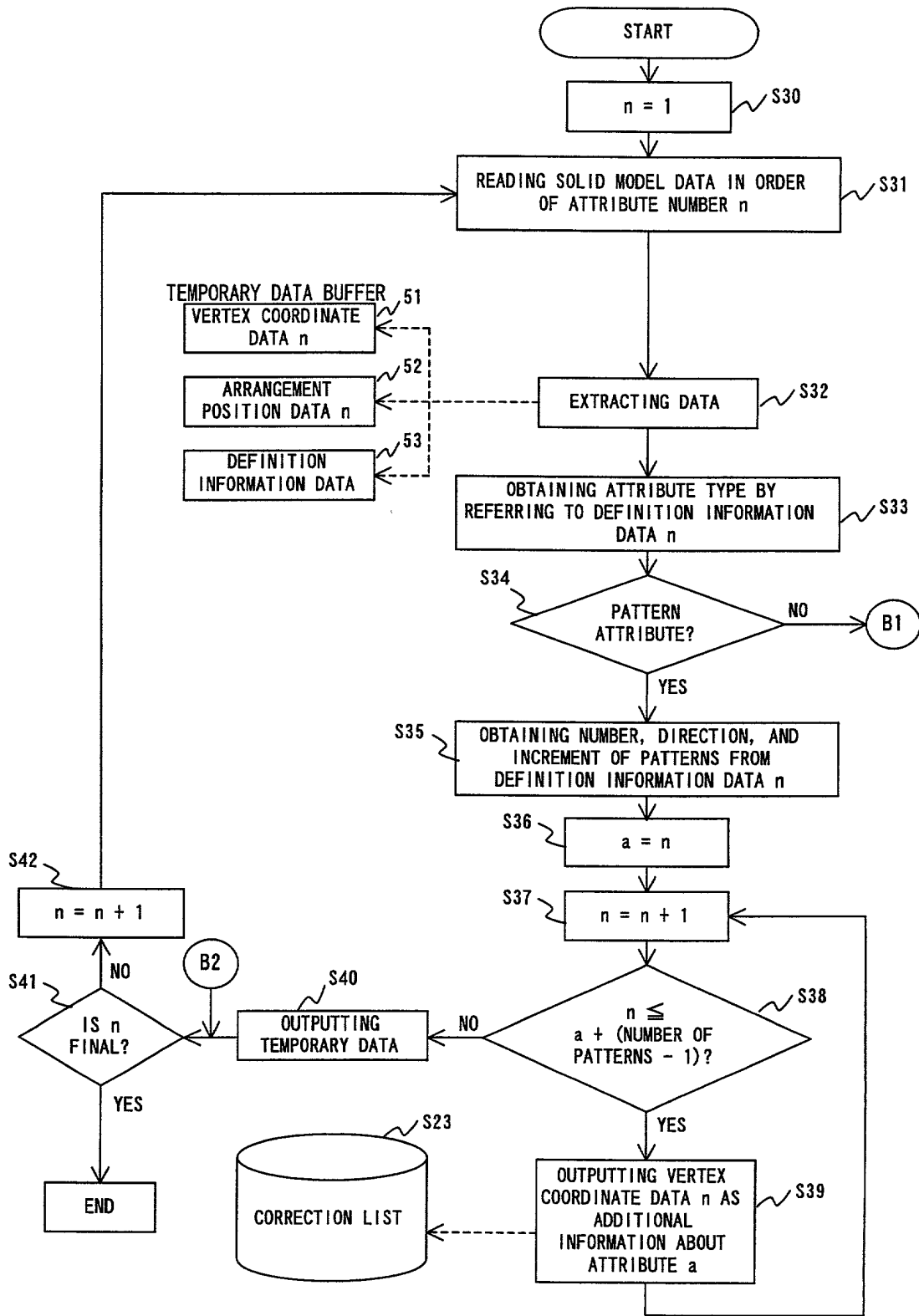


FIG. 18

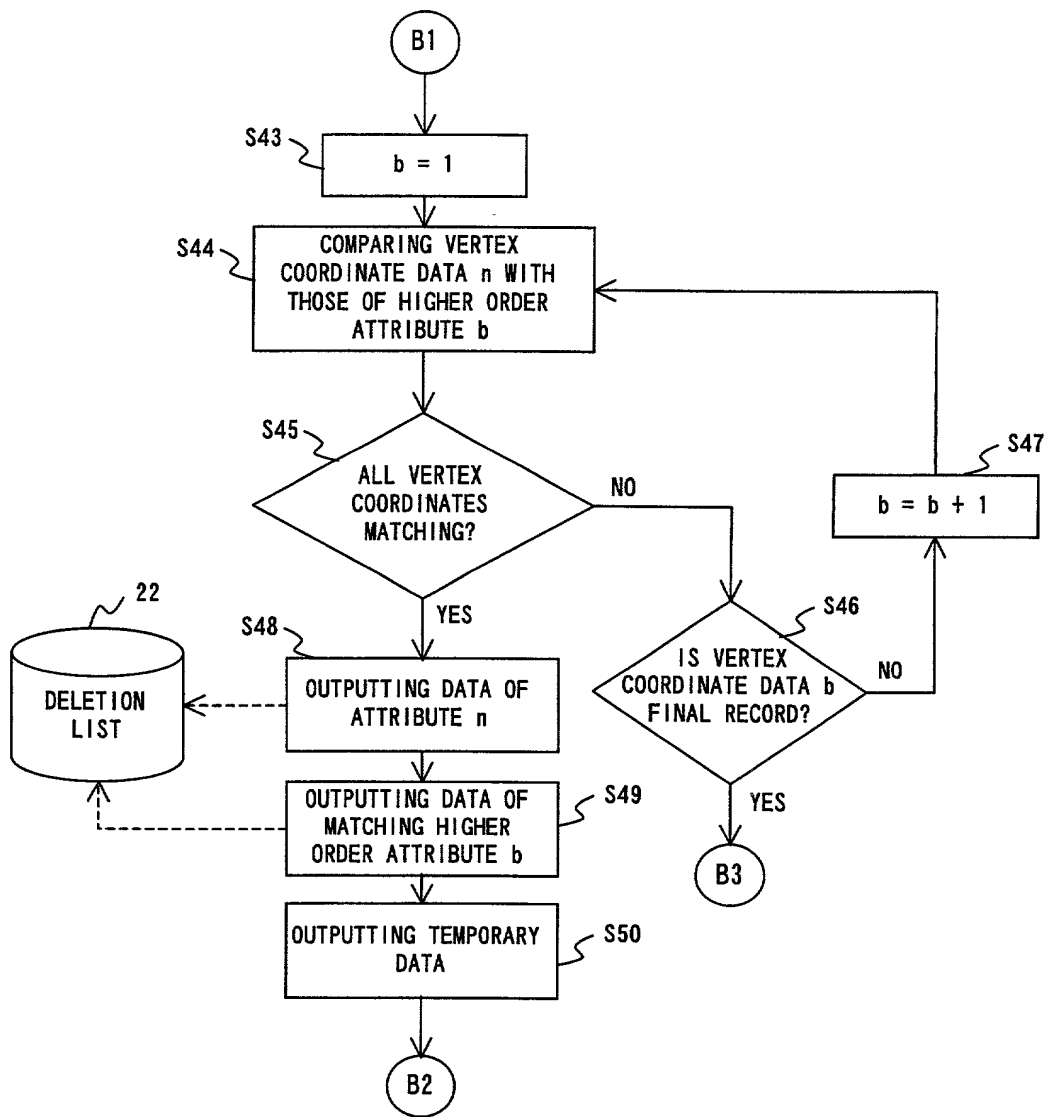


FIG. 19

```

graph TD
    B3((B3)) --> S51[c = 1]
    S51 --> S52[COMPARING VERTEX COORDINATE DATA n WITH THOSE OF HIGHER ORDER ATTRIBUTE c]
    S52 --> S53{VERTEX COORDINATES OF SECTIONAL SHAPE MATCHING?}
    S53 -- YES --> S56[OBTAINING HEIGHT hn FROM DEFINITION INFORMATION DATA n]
    S56 --> S57[OBTAINING HEIGHT hc FROM DEFINITION INFORMATION DATA c]
    S57 --> S58[AMENDING HEIGHT DEPTH DATA  
hc = hc + hn]
    S58 --> S59[OUTPUTTING DATA OF ATTRIBUTE n]
    S59 -.-> 22[(DELETION LIST)]
    S59 --> S60[AMENDING AND OUTPUTTING DEFINITION INFORMATION HEIGHT ABOUT MATCHING HIGHER ORDER ATTRIBUTE c]
    S60 -.-> 23[(CORRECTION LIST)]
    S60 --> S61[OUTPUTTING TEMPORARY DATA]
    S61 --> B2((B2))
    S53 -- NO --> S54{IS VERTEX COORDINATE DATA c FINAL RECORD?}
    S54 -- YES --> B4((B4))
    S54 -- NO --> S55[c = c + 1]
    S55 --> S52

```

FIG. 20

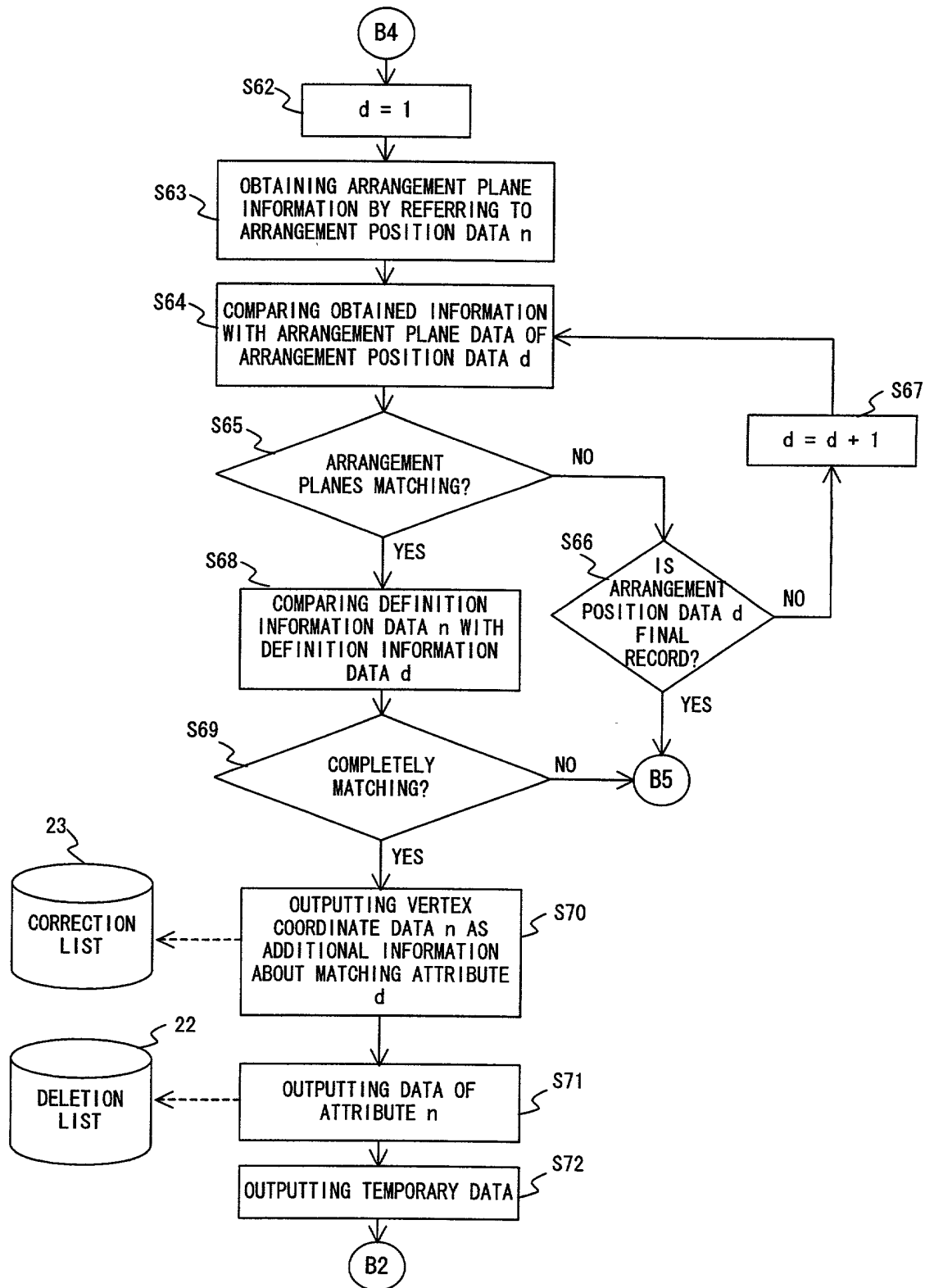
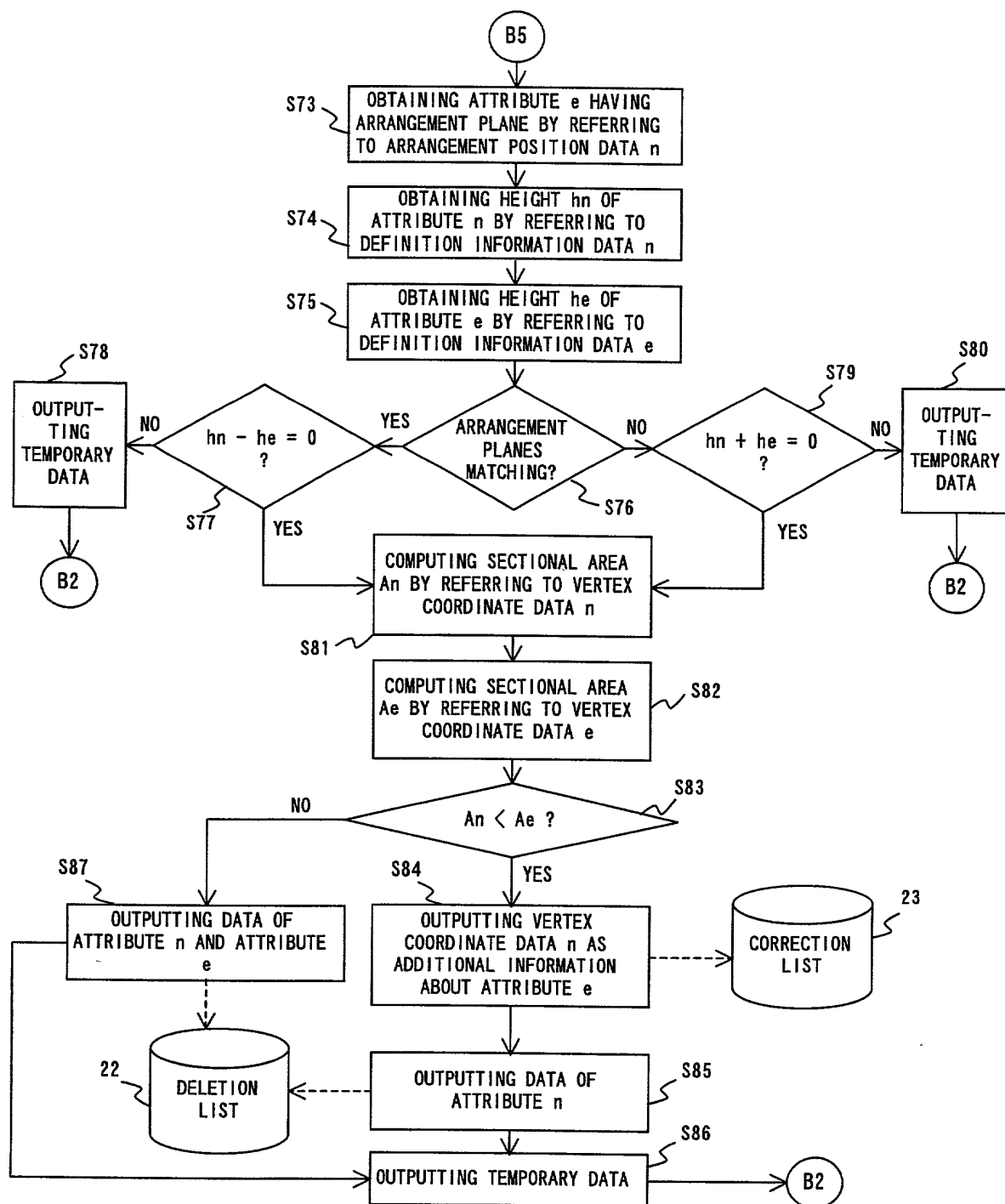


FIG. 21



F I G. 22

NUMBER	ITEM	DATA
1	VERTEX COORDINATES	{(0, 0, 0), (200, 0, 0), (200, 100, 0), (0, 0, 10), (200, 0, 10), (200, 100, 10), (0, 100, 10)}
	ARRANGEMENT POSITION	—
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=10
2	VERTEX COORDINATES	{(12, 5, 12, 5, 10) 10} (12, 5, 12, 5, 40), {(87, 5, 12, 5, 10) 10} (87, 5, 12, 5, 40), {(12, 5, 87, 5, 10) 10} (12, 5, 87, 5, 40)
	ARRANGEMENT POSITION	1:F1, 1:E1-12, 5, 1:E2-12, 5
	DEFINITION INFORMATION	PROJECTION, PROJECTION, h=30
3	VERTEX COORDINATES	{(125, 25, 10), (175, 25, 10), (175, 75, 10), (125, 75, 10)} (125, 25, 5), (175, 25, 5), (175, 75, 5), (125, 75, 5)
	ARRANGEMENT POSITION	1:F1, 1:E1-125, 1:E2-25
	DEFINITION INFORMATION	CUT, PROJECTION, h=-5

FIG. 23

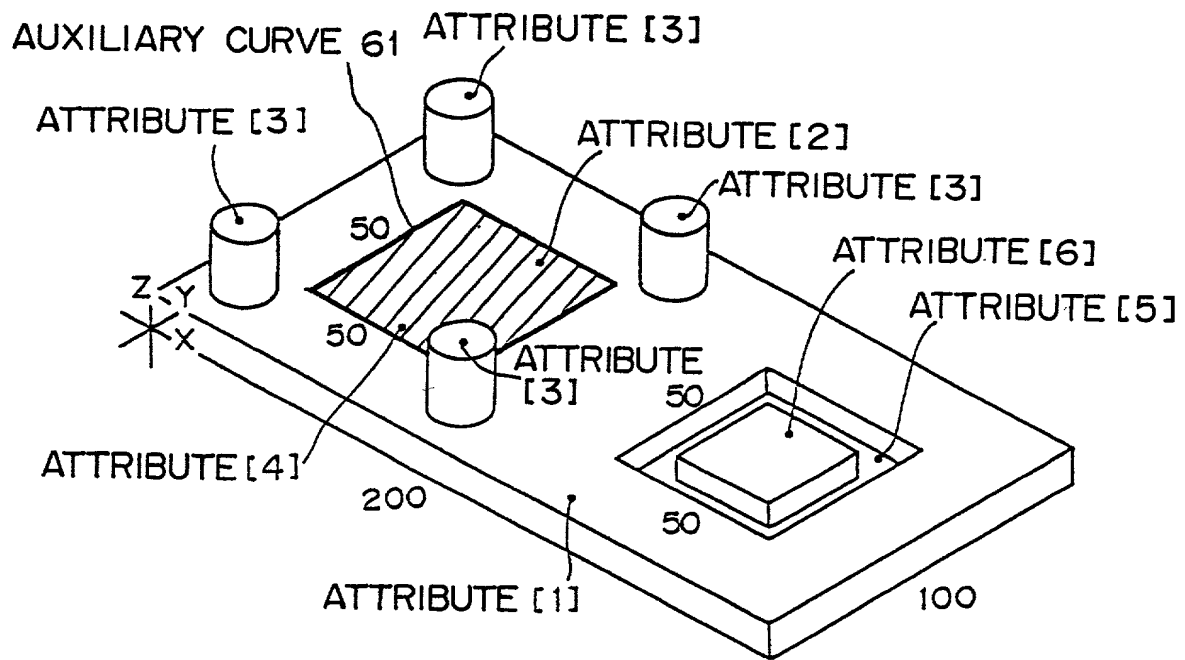


FIG. 24

09734799 120800

NUMBER	ITEM	DATA
2	VERTEX COORDINATES	{ (25, 25, 10) , (75, 25, 10) , (75, 75, 10) , (25, 75, 10) }
	ARRANGEMENT POSITION	1:F1, 1:E1-25, 1:E2-25
	DEFINITION INFORMATION	—

F I G. 2 5

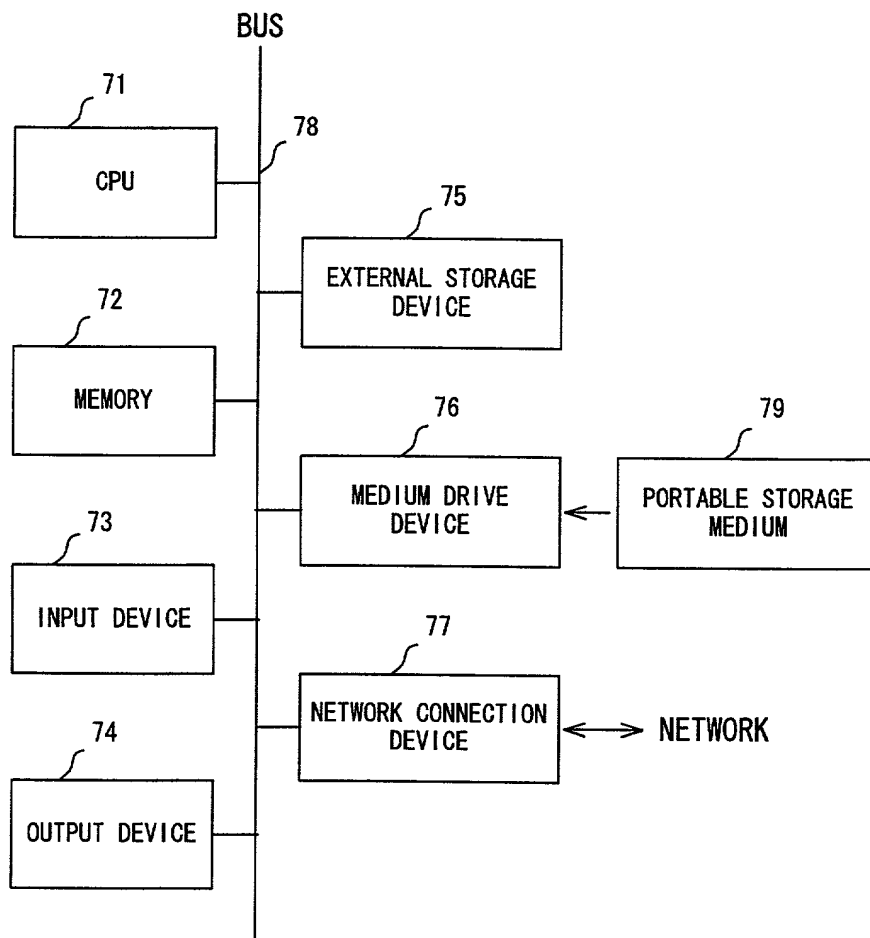


FIG. 26

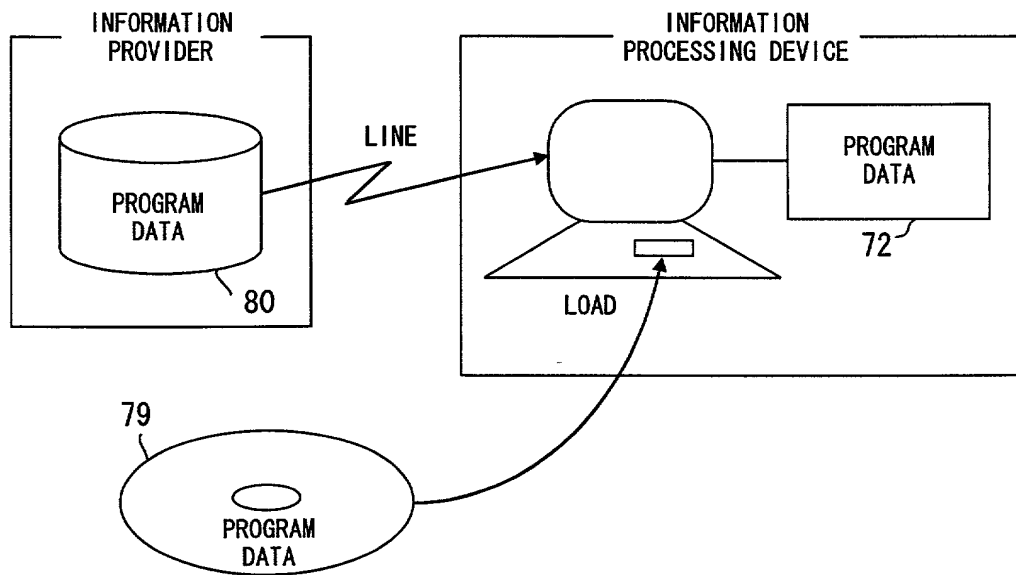


FIG. 27